## United States Coast Guard



# HULL INSPECTION BOOK

Name of Vessel					
Official Number		Class			
Date Completed		Location			
Vessel Built in Comp	liance with S	OLAS: 60	74	74/78	N/A
Route					
Oceans	Limited Coas	stwise	Lakes	/ Bays /	Sounds
Coastwise	Great Lakes		Rivers		
Inspection Type					
Inspection for		Reinspection	on		
Certification (COI)		O Mid-Perio	od		
		O Other	`		
		O First			
		O Second O Third	Pass	enger vess	sels only
		O IIIIU ,			
Inspectors					
1		3			
2		4			

Notes:			
-			
-			
-			

#### **Use of Hull Inspection Book:**

This inspection book is intended to be used as a job aid by Coast Guard marine inspectors during hull inspections of U.S. flagged vessels. The lists contained within this book are not intended to limit the inspection. Each marine inspector should determine the depth of inspection necessary. A checked box should be a running record of what has been inspected. It does not imply that the entire system has been inspected or that all or any items are in full compliance. This job aid does not constitute part of the official inspection record.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to IMO publications, CFR's, NVIC's or any locally produced cite guides for specific regulatory references. Not all items in this book are applicable to all vessels.

**NOTE:** Guidance on how to conduct hull inspections of U.S. flagged vessels can be found in the Marine Safety Manual (MSM) Volume II, Chapter 6: Inspection of Vessels for Certification. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.

#### **Pre-inspection Items:**

#### **Post-inspection Items:**

- · Review MSIS records.
  - MIPIP
  - MICOI
- Obtain copies of forms to be issued.
- Issue letters/certificates to vessel.
- Complete MSIS entries.
  - MIAR
  - MSDS
  - MIDR
  - VFLD
  - VFID
- Initiate Report of Violation (ROV) if necessary

Notes:			
-			

# Table of Contents:

Section 1: Administrative Items	
IMO Applicability Dates	
Section 2: Certificates and Documents	
CertificatesLogs and ManualsPollution Prevention Records	
Section 3: Inspection Items	
Navigation Equipment	1
Integral Cargo TanksGround Tackle	16
Lifesaving EquipmentFire Protection	22
Section 4: Drills	
Fire DrillAbandon Ship Drill	
Section 5: Appendices	
Recommended US Vessel Deficiency Procedures Deficiency Summary Worksheet Notes	29 3
Conversions	34

## **Deficiency Summary Worksheet:**

# Name of Vessel VIN Req't. Issued / Date Completed Deficiency MSIS Code

### **Involved Parties & General Information:**

Vessel's Representatives	
Phone Numbers	
Owner—Listed on DOC (if applicable), or COFR	
No Change	
Operator	
No Change	

☐ Abandon Ship I	<u>Drill:</u>	
General alarms / signals	Familiarity with duties	Boat release
Muster lists	Provide equipment	Boat operation
Muster of crew / passengers	Familiarity with equipment	Egress procedures
Crew response	Lower lifeboat	Davit-launched liferaft dri
Language understood by crew	Brake operation	Communication w/ bridge
Lifejackets	Engine start	Lighting
(SOLAS 74/78 III/18.3; MSM Vo	ol. II/22.C.7.h)	
Location:	Tim	e to Water:
Notes:		
_		

Section 2: Certificates and Documents

Name of Certificate	Issuing Agency	# Q	Port Issued	Issue Date	Exp. Date	Endors. Date
Certificate of Documentation No Change	nsce					
Classification Document No Change						
Certificate of Financial Responsibility (COFR) No Change	USCG					
Safety Construction (SLC) No Change						
Safety Equipment (SLE) No Change	USCG					
Safety Radio (SLT) No Change						

	Cargo oil containment	33 CFR 155.310	<u>Certificates:</u>	
	<ul><li>Size</li><li>Drains</li><li>Scupper closures</li></ul>		<ul><li>ISM Code</li><li>Safety Management System</li><li>Shipboard Operations Plan</li></ul>	SOLAS 74/78 IX/3
	<ul><li>Fuel oil containment</li><li>Portable</li><li>Fixed</li></ul>	33 CFR 155.320	☐ Stability letter posted in pilothouse	46 CFR 78.12-1 46 CFR 97.11-1 ICLL Reg. 10(2)
	Prohibited oil spaces	33 CFR 155.470	Annual drug and alcohol program audit	46 CFR Part 16
	Emergency shutdown	33 CFR 155.780	☐ Officers' licenses current	
	Deck lighting	33 CFR 155.790	☐ GMDSS endorsement	47 CFR Part 80
	Oil transfer hose  • Condition	33 CFR 155.800	FCC Station License Safety Radio Certificate	
	<ul> <li>Markings</li> <li>Hose assembly requirements</li> <li>Tests and inspections</li> </ul> Fuel tank vents		GMDSS maintenance personnel  1st Class Radiotelegraph Operator's Certifice 2nd Class Radiotelegraph Operator's Certifice 3rd Class Radiotelegraph Operator's Certifice	cate
	<ul><li>Flame screens</li><li>Closures</li><li>Pollution containment</li></ul>	33 CFR 155.320	Required international safety convention certificates posted and valid	
	Garbage  Shipboard garbage properly disposed	33 CFR 151.63 MARPOL Ax. V/3	<ul><li>Liferaft servicing certificates</li><li>Annual service</li></ul>	46 CFR 160.151-57(p) SOLAS 74/78 III/19.8
			☐ Cargo Gear Certificate	46 CFR 91.37-75
Note	s:		Notes:	

	<ul> <li>Fixed fire extinguishing systems</li> <li>Controls, instructions, marking</li> <li>Alarms tested</li> <li>Piping</li> </ul>	46 CFR 71.25-20(a)(2) 46 CFR 71.25-20(a)(3) 46 CFR 76.15 46 CFR 76.17		<ul> <li>Shipboard oil pollution emergency plan</li> <li>Approved by Coast Guard / class society</li> <li>Contact numbers correct</li> <li>Immediate Actions List</li> </ul>	MARPOL Ax. I/26.1 33 CFR 151.26
	<ul> <li>Heads, distribution</li> <li>Bottles weighed annually</li> <li>Bottles hydrostatically tested (every 12 years)</li> <li>Flexible loops tested or replaced (10% per year)</li> <li>Foam tanks (refilled or tested)</li> </ul>	46 CFR 76.25 46 CFR 91.25-20(a)(2) 46 CFR 91.25-20(a)(3) 46 CFR 95.15 46 CFR 95.17 SOLAS 74/78 II-2/21		Vessel response plan (vessels carrying oil as secondary cargo)  Approved by Coast Guard Annual review by owner / operator	33 CFR 155.1030 33 CFR 155.1045 33 CFR 155.1065 33 CFR 155.1070
	<ul> <li>Sea suction, strainers</li> <li>Fixed system tested</li> <li>Storage space / door</li> <li>Sprinkler head tank</li> </ul> Type of system: (circle appropriate type)	MSM Ch. 18.I.9 NVIC 6-72, Change 1 NVIC 8-73		Oil transfer procedures  Posted List of products carried by vessel Description of transfer system including a line diagram of piping	33 CFR 155.720
	Low Proceure High Proceure	oam Sprinkler		<ul> <li>Number of persons required on duty</li> <li>Duties by title of each person</li> <li>Means of communication</li> </ul>	
	Fire main system  Pumps Piping Cut-off valves Drains	46 CFR 76.10 46 CFR 95.10 NVIC 6-72, Change 1 SOLAS 74/78 II-2/4 SOLAS 74/78 II-2/21		<ul> <li>Procedures to top off tanks</li> <li>Procedures to report oil discharges</li> </ul>	
	<ul> <li>Fire stations</li> <li>Hydrants (2 effective streams)</li> <li>Nozzles and spanners</li> <li>Fog applicators (&lt;6 feet in length, in engineroom)</li> <li>Hose <ul> <li>UL approved</li> <li>Correct length</li> </ul> </li> <li>Markings</li> <li>Equipment compatible</li> </ul>	46 CFR 76.10-10 46 CFR 95.10-10 NVIC 6-72, Change 1 SOLAS 74/78 II-2/4 SOLAS 74/78 II-2/21			
□ Note:	Total length of all hose tested  • Hydrostatically tested to at least 100 psi  • Proper threads  • Approved hose	46 CFR 76.10-10 46 CFR 95.10-10 MSM Ch. 18.I.6 46 CFR 91.25-20(a)(4) 46 CFR 71.25-20(a)(4)	Note	es:	
1016	·-				

<ul><li>Equipment</li><li>Required drills held</li><li>Magazine</li></ul>	SOLAS 74/78 III/17.49 MSM Ch. 6.R.3.s		<ul> <li>GMDSS meets requirements for vessel operating area</li> </ul>	33 CFR 164.41 NVIC 9-93
			Internal communications and control system  • EOT failure alarms	46 CFR 113.30 46 CFR 113.35
<ul> <li>Type</li> <li>Lifebuoys</li> <li>Lights</li> <li>Lines</li> <li>Smoke signals</li> <li>Stowage</li> </ul>	46 CFR 199.70(a) SOLAS 74/78 III/7 SOLAS 74/78 III/21 SOLAS 74/78 III/27 MSM Ch. 6.R.3.i		<ul> <li>Telephones</li> <li>Voice tubes</li> <li>Emergency loudspeaker system</li> <li>Public address system</li> <li>Bell pulls</li> <li>Pilothouse controls</li> </ul>	46 CFR 113.50
Adult Children  Retro-reflective tape  Lights  Whistles  Work vests  Stamped passed  Number of lifejackets rejected by	46 CFR 199.70(b) SOLAS 74/78 III/7.2.2 MSM Ch. 6.R.3.m MSM Ch. 6.R.3.q		Navigation lights and signals  Control panels Running lights Anchor lights Special day and night signals Distress signals and stowage Flag signals, international code Whistle, light, bells, gongs Day and night signal devices	72 COLREGS 46 CFR 199.60
	46 CFR 199.70(b) SOLAS 74/78 III/7.2 46 CFR 199.80(c) 46 CFR 199.70(b)(2) 46 CFR 199.80(c) 46 CFR 199.217		Steering gear  Main gear tested (all stations)  Auxiliary gear tested (all stations)  Instructions and markings  Rudder angle indicator	33 CFR 81.9 33 CFR 164.35 MSM Ch. 14.B
Immersion suits  Condition	46 CFR 199.80(c) 46 CFR 199.273 SOLAS 74/78 III/21.4 SOLAS 74/78 III/27.3	П	<ul> <li>Illumination</li> <li>Alarms</li> <li>Block diagram</li> </ul> Maneuvering facts sheet with warning	46 CFR 113.43
	SOLAS 74/78 III/30.2.7 MSM Ch. 6.R.3.n		statements	33 CFR 164.35
	<ul> <li>Lines</li> <li>Smoke signals</li> <li>Stowage</li> <li>Markings</li> <li>Lifejackets</li> <li>Adult Children</li> <li>Retro-reflective tape</li> <li>Lights</li> <li>Whistles</li> <li>Work vests</li> <li>Stamped passed</li> <li>Number of lifejackets rejected by inspector</li> <li>Lifejacket stowage</li> <li>Required notices and markings</li> <li>Stowage lockers</li> <li>Wearing instructions</li> <li>Location instructions (passenger vessels)</li> <li>Stateroom notices posted</li> <li>Immersion suits</li> </ul>	Lines  Lines  Solas 74/78 III/21  Solas 74/78 III/27  MSM Ch. 6.R.3.i  Stowage  Markings  Lifejackets  Adult Children Solas 74/78 III/7.2.2  MSM Ch. 6.R.3.m  Retro-reflective tape	Lines	Lights Lines SolAs 74/78 III/21 SolAs 74/78 III/21 SolAs 74/78 III/27 Stowage Markings Lifejackets Adult Children SOLAS 74/78 III/7.2.2 MSM Ch. 6.R.3.m  Maneuvering facts sheet with warning statements

Disengaging apparatus examined or tested and marked as required	46 CFR 199.45(b) SOLAS 74/78 III/41 MSM Ch. 6.R.3.a	☐ Galley • Equipment	MSM Ch. 6.P.8 MSM Ch. 13.C
<ul> <li>Universal joints</li> <li>Safety latches</li> <li>Hooks</li> <li>Locking knuckles</li> <li>Frame</li> <li>Motor lifeboats*</li> </ul>	46 CFR 199.45(b) SOLAS 74/78 III/41	<ul> <li>Sanitation</li> <li>Ventilation</li> <li>Means of escape from accommodation, machinery, and other spaces</li> <li>Two required (some exceptions)</li> <li>Dead end corridors</li> </ul>	46 CFR 72.05-50 46 CFR 72.10 46 CFR 92.10 SOLAS 74/78 II-2/45
<ul> <li>Engine operating test</li> <li>Cooling water pump</li> <li>Ahead and astern test</li> <li>Fuel tanks</li> <li>Searchlight test (passenger vessels)</li> <li>Annual fuel changed</li> <li>Extinguishers serviced</li> </ul>	MSM Ch. 6.R.3.e	<ul> <li>Absence of locks</li> <li>Gas freeing for repairs</li> <li>Current Gas Chemist Certificate for areas as required</li> <li>Date</li> <li>Chemist No</li> </ul>	MSM Ch. 5.I
<ul><li>Hand-propelled lifeboats</li><li>Flemming gear</li></ul>	46 CFR 199.45(b)	Structural Integrity:	
<ul> <li>Transmission oil</li> <li>Radio installation for lifeboats complies with FCC and/or international convention (where required)</li> <li>Portable</li> <li>Fixed</li> <li>Lifeboat operational test</li> </ul>	SOLAS 74/78 III/6 MSM Ch. 6.R.3.I 46 CFR 199.45(b)	<ul> <li>Hull structure (list inaccessible compartments or areas)</li> <li>Decks</li> <li>Shell</li> <li>Bulkheads</li> <li>Tank tops</li> <li>Strength members</li> </ul>	46 CFR 72.01 46 CFR 92.01 ICLL 66 Reg. 1
<ul> <li>Davits</li> <li>Foundations</li> <li>Moving parts</li> <li>Fittings</li> <li>Fairleads, cleats, or cruciform bits</li> </ul> Falls (date last renewed or end-for-ended)	SOLAS 74/78 III/19 MSM Ch. 6.R.3.a 46 CFR 160.032 SOLAS 74/78 III/48 MSM Ch. 6.R.3.a	<ul> <li>Hull openings and closures</li> <li>Side ports</li> <li>Air ports and dead covers</li> <li>Refuse chutes</li> <li>Hatch covers</li> <li>Closing devices, gaskets</li> <li>Light / water test</li> </ul>	46 CFR 42.15 MSM Ch. 6.F.5 ICLL 66 Regs. 12 - 23
* Items tested in conjunction with Abandon Ship Drill.	SOLAS 74/78 III/48 MSM Ch. 6.R.3.a(1)	<ul><li>Deck openings and closures</li><li>Closing devices</li><li>Gaskets</li></ul>	MSM Ch. 6.F.5 ICLL 66 Regs. 12 - 20
Notes:		Light / water test  Notes:	

Lifeboat equipment and stowage (use table below to determine required equipment)

46 CFR 199.175 SOLAS 74/78 III/41

(4.2.2	table below to determine req		- 7	30LA3 74/70 111/41	
Item Number	ltem		ational age	Short International Voyage	
Number		Lifeboat	Rescue Boat	Lifeboat	Rescue Boat
1	Bailer <sup>1</sup>	1	1	1	1
2	Bilge pump <sup>2</sup>	1		1	
3	Boathook	2	1	2	1
4	Bucket <sup>3</sup>	2	1	2	1
5	Can opener	3		3	
6	Compass	1	1	1	1
7	Dipper	1		1	
8	Drinking cup	1		1	
9	Fire extinguisher	1	1	1	1
10	First aid kit	1	1	1	1
11	Fishing kit	1			
12	Flashlight	1	1	1	1
13	Hatchet	2		2	
14	Heaving line	2	2	2	2
15	Jackknife	1		1	
16	Knife <sup>1,4</sup>		1		1
17	Ladder	1	1	1	1
18	Mirror, signalling	1		1	
19	Oars, units 5,6	1	1	1	1
20	Painter	2	1	2	1
21	Provisions (units/persons)	1			
22	Pump <sup>7</sup>		1		1
23	Radar reflector	1	1	1	1
24	Rainwater collection device	1		1	
25	Repair kit <sup>7</sup>		1		1
26	Sea anchor	1	1	1	1
27	Searchlight	1	1	1	1
28	Seasickness kit (units/person)	1		1	

	Hull marks	46 CFR 67.120
	<ul><li>Name</li><li>Hailing port</li><li>Official number</li><li>Net tonnage</li></ul>	
	<ul><li>Draft marks</li><li>Legible</li><li>Properly sized</li></ul>	46 CFR 78.50-10 46 CFR 97.40-10
	<ul> <li>Properly spaced</li> <li>Load line marks</li> <li>Conform to certificate</li> <li>Legible</li> </ul>	46 CFR 78.50-15 46 CFR 97.40-15 ICLL 66 Reg. 4-9
Integral Cargo Tanks:		
	Warning notices and signals posted	46 CFR 70.05-30 46 CFR 90.05-35 MSM Ch. 10.C.4
	Pumps  Pumps and controls  Relief valves  Piping-valves  Lighting and wiring  Cofferdams	46 CFR 70.05-30 46 CFR 90.05-35 MSM Ch. 10.C.4
	Cargo spaces  Trunks and hatches Ullage openings Liquid level gauges Deck penetrations Heating coils Internal examination	46 CFR 91.15-1 46 CFR 91.25-37
Notes:		